



STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305 • (415) 321-1200

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Department of Genetics

Professor Joshua Lederberg

Dear Dr. Miller--

Do you know of any studies on the possibility that smoking may be the leukemogen? (for congenital leukemia).

Pinning a 15% reduction on cautions on obstr. X-rays seems to imply 1) a drastic reduction in exposure (can it be more than 1 r per capita?), and 2) a sensitivity $\gg 10^{-3}$ per r, which is not particularly borne out by the Hiroshima data.

Your earlier papers seemed more skeptical about this particular etiology; anything new to change your mind?

I think you pointed out yourself that the X-ray "users" would be an atypical sample; it would be interesting and important to derive specific correlations between X-ray exposure and use of various/ drugs, smoking, etc. The NINDS perinatal morbidity study should be very good for that, even if not large enough to be too fruitful vis-a-vis leukemic outcome.

Sincerely,